

## **Docket No. 02-230**

# **Comment Opposing Digital Broadcast Copy Protection**

Submitted by

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# Body of Comment

## 1. Introduction

I oppose the Broadcast Flag. I believe that it is an ill-conceived "solution" to a non-problem, whose mere consideration represents a dramatic slap in the face to citizens. Special Interests, in this case the entertainment industry, have undue influence in government and the broadcast flag proposal appears to impose a different set of regulations on the public than what they want or have authorized via their elected officials in Congress.

It is clear from even a cursory inspection of public attitude that government mandated Digital Rights Management is not just unpopular, but highly despised. Here the FCC essentially proposes to adopt regulations that could not win a majority in the Congress. The public's dislike of mandatory copy protection in Digital TV appears to be reflected in the early submissions posted in this rulemaking. I urge the FCC to turn a cold shoulder to the narrowly focused special interests of the entertainment industry and instead place greater weight on listening to the voice of ordinary citizens, who overwhelmingly reject the broadcast flag.

## 2. FCC Jurisdiction does not include Copyright Protection

Section 10 asks for comments on "the jurisdictional basis for Commission rules dealing with digital broadcast television copy protection", and I would like to start there because this is the most important point. It simply is not the FCC's place to create Copyright policy.

The Constitution clearly places the power for creating Copyright laws with Congress, not the FCC. Congress has not delegated this authority to the FCC, and the FCC seriously oversteps its bounds to consider mandatory Copyright protection without statutory backing from Congress. The Copyright laws represent a "delicate balance" and must be made by legislative bodies for precisely the reason that the FCC demonstrates here: regulatory agencies are not as equipped as Congress to balance the competing interests inherent in the Copyright grant. Copyright protection is a statutory, not natural right, granted by the People for their own benefit first. The benefit to authors comes second. The FCC should defer to Congress for any adoption of digital broadcast copy protection.

## 3. "Withholding" of Quality Digital Content is not a Problem

The Notice of Proposed Rulemaking (FCC 02-231) begins with an introduction that makes several assertions that deserve further skeptical review. In relevant part, section 1 reads:

Without adequate protection, digital media, unlike its analog counterpart, is susceptible to piracy because an unlimited number of high quality copies can be made and distributed in violation of copyright laws. In the absence of a copy protection scheme for digital broadcast television, content

providers have asserted that they will not permit high quality programming to be broadcast digitally. Without such programming, consumers may be reluctant to invest in DTV receivers and equipment, thereby delaying the DTV transition.

This is a rather loaded beginning to a request for public comment. Fortunately, section 3 requests comment on "nature and extent of the piracy concerns expressed by content providers" and further asks "If such programming is being withheld, will it continue to be withheld in the absence of a regulatory regime?"

Those are good questions, but the FCC should not allow content providers to make the unchallenged assertion that consumers will be reluctant to invest in DTV without a broadcast flag. American tradition says that the free market, and not government regulation is best equipped to determine what technologies consumers most want to invest in. This consumer, in particular, would prefer to invest in DRM-free technologies even if some content is not marketed by choice of its maker. Unreliable recording functionality is a much bigger detraction to "high quality digital content" than not having some works available on TV when they are available elsewhere. Loss of basic features, such as "time-shifting" and "watch again" are much more important to me than loss of content. If the argument for the broadcast flag rests on an economic analysis of consumer benefit, no government regulation is needed: simply allow the TV makers to optionally augment their TVs with DRM. The economic argument for the broadcast flag is a sham.

Now to the first question from section 3: what are the nature and extent of the piracy concerns expressed by content providers? Digital piracy, like analog piracy, does exist and it does cause content providers damage. However, the idea that "digital is different" or more susceptible to piracy is wrong, and the impact of the digital piracy problem has been grossly exaggerated by content providers. Content providers made all the same arguments before when the VCR came out and when cassette copying became prevalent. Content providers have always sought sweeping protections, they have never before received them, and they have always remained profitable despite low levels of piracy. Most citizens understand that they must reward content producers financially if they want good content. The law as it is now provides adequate punishment for pirates and adequate protection for consumers rights to make unauthorized copies as fair use. Nothing in this basic dynamic really changes because content is delivered with bits instead of analogue.

The idea that "digital media, unlike its analog counterpart, is susceptible to piracy because an unlimited number of high quality copies can be made and distributed" is erroneous. Analog is just as susceptible to copying. Analog content can be digitized and copied perfectly. Indeed, we have all read the reports of movies appearing on the internet as a result of camcorders recording the analog movie directly off of the screen in movie theaters. This is just one example, but there are no exceptions. You can make an mp3 from a vinyl record. The idea that digital piracy of "full quality" is rampant is also false. Typically "lossy" compression is used to make the result smaller. I do not defend in such piracy, but nevertheless, digital piracy is no more likely for works that were originally digital than for works that were originally analog. The content providers have recycled old

arguments and applied them to new technology to further their own interests at public expense.

The second question asked in section 3 is "If such programming is being withheld, will it continue to be withheld in the absence of a regulatory regime". Content providers made the "works will be withheld" argument before in the context of the VCR. It didn't happen then and it won't happen now.

Many, even most, of the biggest blockbuster movies of all time have been broadcast unprotected on regular TV, even though viewers could easily copy them. Many recent blockbusters, such as Spiderman, have had great success at the box office and on tape even though they were available on the internet in pirated digital form even before they were released to theaters.

They made the same "works will be withheld" argument to justify the Digital Millennium Copyright Act's protection of DVD encryption, yet after the movie studios knew the Content Scrambling System was cracked and that their law was useless towards actually removing DeCSS from the internet, they have not withheld any movies from DVD release. Quite the opposite is happening: DVD is replacing VCR as more profitable for the industry and more enjoyable for consumers.

There is no credible reason to think content providers will withhold high quality digital content because of piracy of digital TV. The tired "works will be withheld" argument seems more grounded in lobbyist's talking points memos than in a real harm to the public. Most people are not pirates, and so long as this is true, money will be made by those who can fill the demand for content, regardless of small percentages of unrealized revenue attributable to piracy. Laws and regulations that treat all people as potential thieves only serve to anger the public and make them feel less sympathetic to the content providers. This phenomenon should not be underestimated.

#### **4. The Broadcast Flag will not Substantially Increase the Release of High Quality Digital Content**

Adding the broadcast flag will not prevent, nor even diminish internet piracy, so the broadcast flag simple will not be the shield from piracy that would change a content providers mind not to withhold technology. I will discuss the technical limitations that make this so below.

If a single person circumvents the broadcast flag, the internet will find copies of TV programming on it. Then the industry will be in the same position as DVD movie content distributors are following the cracking of their Content Scrambling System: highly successful despite a small uncontrollable amount of piracy. The bottom line is that pirates will circumvent anything that is done, but the majority of honest citizens do not need to be treated as pirates.

#### **5. Consumers will not Accept Mandatory Copy Protection Enforcement**

In section 3, the notice asks for comment regarding the market effects of having or not having the broadcast flag: "To what extent would the absence of a digital

broadcast copy protection scheme and the lack of high quality digital programming delay or prevent the DTV transition? Would the resulting dynamic threaten the viability of over-the-air television? What impact would this have on consumers?"

Digital copy protection for TV programming removes capabilities consumers have grown to expect. DRM technologies also raise research and development costs that can only increase prices for consumers while slowing time to market for new products. In fact, digital TV uptake by consumers will be much smoother if left to the free market. Regulation shoving unwanted DRM technologies onto consumers that remove expected fair use capabilities are the real threat. Before DVD, a movie format called DiVX offered "high quality digital content" to consumers subject to restrictions on copying and use. It bombed. The software market in the early years of the personal computer saw much more technically advanced attempts at copy protection.

Ultimately, unprotected works achieved greater market success and every copy protected work was cracked.

This situation will be much worse in the arena of digital TV. Ask your sister or next door neighbor if she or he wants to buy a TV that might not be able to record their favorite show. Even if it means they can get movies sooner and a little more programming, real people in the real world want assurances they will be able to record "ER", "Sex in the City", and "The Sopranos". Cast doubt on this, and they will reject digital TV and stick with analog. Give them comparable programming to what they have now, with no DRM funny business, and sharper pictures and sound and they'll move quickly.

A better questions for comment would be: "To what extent would the presence of a digital broadcast copy protection scheme and the lack of guaranteed fair use functionality delay or prevent the DTV transition. Will the resulting dynamic threaten the viability of digital television? Why would anyone pay more to switch to a TV medium with less capability?"

## **6. Technical Impediments Will Render the Broadcast Flag Useless for Copy Protection**

The notice asks specifically for comments on effectiveness in section 4: "We seek comment on the effectiveness of any such technological model in protecting digital broadcast content from improper redistribution."

The Broadcast flag, like DVD encryption, will utterly fail to prevent improper redistribution. Because the viewer must own a TV that enforces it, the broadcast flag will be a "trusted client" system. "Trusted client" security mechanisms cannot be, have never been, and will never be secure against a determined cracker. I am not aware of any trusted client implementation that has never been cracked. The broadcast flag will follow in the footsteps of DVD's, music watermarking, a thousand different computer games, cable boxes, and "smart cards". Laws will not help nor will huge monetary investments in wishful thinking. The broadcast flag will be cracked.

Once the broadcast flag is cracked, anyone who wants to break the law will be able

to, because the crack method will spread despite all attempts to stop it. People will record copy protected shows and record them and post them to the internet with copy protection removed. Other people will download and redistribute them. All of these people are already breaking the law. Their acts are immoral and undefendable, but inevitable and predictable. The result is that content providers will be in the same situation they would be in with no copy protection, completely defenseless against a small pool of people who disrespect their copyrights. As the examples above show, it is a familiar situation for them. They will profit anyway.

## **7. Mandating Copy Protection in Digital Receivers Contradicts Congressional Policy**

The Notice of Proposed Rulemaking requests comments regarding mandates on digital receivers. In section 6, it asks for comment on "whether the Commission should mandate that consumer electronics devices recognize and give effect to the ATSC flag". In section 7 comment is sought on "the appropriate entity to make an approval determination." The appropriate entity is Congress itself and the only Congressional enactment regarding technical protection measures frowned on such mandates.

The Digital Millenium Copyright Act is the supreme law of the land (although many think parts of it are unconstitutional, no court has yet agreed). Its provisions are binding on the FCC, and until or unless it is revised, the balance that it strikes between the various competing stakeholders in the Copyright arena are owed respect. The DMCA's governs technological protection measures that protect access to copyrighted works or rights of the copyright holder. The Supreme Court has often stated that the Copyright Act is both a grant of power and a limitation on its use. It is not the place of the FCC to recalibrate the policy balance struck by Congress.

The DMCA provides in section 1201(c)(3) provides that "Nothing in this section shall require that the design of, or design and selection of parts and components for, a consumer electronics, telecommunications, or computing product provide for a response to any particular technological measure...". This is the so-called "no mandates" clause.

An FCC regulation establishing mandates on the manufacture of digital receivers is little more than an attempt to provide what Congress specifically stated was not desired. Congress wanted the free market to promote its own technological measures. Congress did not want to see any player device makers forced to adopt measures just because content providers did. It is clear that the content providers are attempting to convince the FCC to do for them what Congress specifically rejected. The FCC should leave Copyright protection balancing acts to Congress, both as a matter of jurisdiction under the Constitution (as I argued above in section 2) and as a matter of policy, when Congress has specifically stated it's desires.

## **8. Mandatory Copy Protection will Slow Innovation In the Electronics Industry**

In section 9, the notice seeks comment on "the potential effect of a broadcast flag requirement on the development of new consumer technologies," and "on the cost impact, if any, that a broadcast flag requirement would have on affected consumer electronics equipment."

Regulations and government mandates inevitable slow innovation and increase cost. The broadcast flag in particular will be an extremely stiffling measure, because of two surging trends in the arena:

- 1) television receivers are merging with ordinary computers, and
- 2) open source software is proving to be a serious contributor to software innovation.

It is highly likely that by the time DTV is deployed, large number of consumers will think of digital video as just another form of multi-media that their PC controls. It is also highly likely that a substantial chunk of the desktop and media device market will be run on open source software.

Because of the DMCA, the broadcast flag will not be amenable to open source development. An open source project cannot share proof of concept code without risking liability under the DMCA. Unless you have a finished product that fully implements the flag, you cannot share your code if a mandate is in place. This requirement makes open source development, which depends on sharing unfinished code, too risky to do in the United States. For example, the DeCSS tool was created to demonstrate coding concepts to developers working on a full blown DVD player for Linux. Even though their ultimate aim was to create a player that was exactly like commercial ones that enabled playback without exposing the unprotected work, along the way they had to create something like DeCSS, which ran afoul of the DMCA when non-developers like the defendants in the lawsuit got a hold of it. The FCC should not adopt rules which exclude, even indirectly, harm open source development and innovation.

Technology mandates may be a death blow to open source projects, but they also harm regular private innovations as well. A private development effort has to write device drivers and software interfaces to implement the measure. Because computers are taking over video players, the result should be a climate where commodity products are reused and small amounts of original work are needed to produce innovative products. In short, the barrier to entry will be low. Mandates will dramatically increase the amount of task specific development that must occur. This raises costs and slows time to market for those who participate, but worse, because it raises the barrier to entry, fewer technology providers will enter the market. Combined with that the large segment of potential open source developers, the result will be very slow innovation in the video electronics market.

## **9. There is a First Amendment Right to Make certain Unauthorized Copies**

Section 8 seeks comment on the First Amendment rights of consumers. Mandatory copy protections undercuts the fair use free speech rights that save the Copyright Act from the sharp axe of the First Amendment. All Copyright is granted to benefit the public and chief among such benefits is the fair use right.

## **10. Conclusion**

The FCC should refrain from charging into the Copyright balancing debate. Digital Rights Management is a political issue that is best decided by Congress. The prospect of content providers withholding works unless a broadcast flag is mandated is an unfounded fear that has more to do with lobbying talking points than real world business decisions. The impact of a broadcast flag on high quality content is negligible. If "quality" is defined by the consumer, and not the producer, the broadcast flag decreases quality by crippling expected features.

Past attempts at copy protection have demonstrated that given the choice consumers prefer not to have it, even if better content is available. In the TV arena, this preference is extremely powerful, since consumers expect to make unfettered copies for personal use. The broadcast flag will utterly fail to make any noticeable dent in piracy of the content it protects because it inevitably will be cracked and once cracked, distribution of pirated copies on the internet is unstoppable. Despite this, most consumers obey the law and content producers will make profits.

Technology mandates should be left to Congress and Congress set policy in the DMCA that rejects them because mandates stifle innovation and free markets. This would be especially true in the digital television market, because commodity personal computing technology combined with open source development trends create a very low barrier to entry that will be substantially negatively impacted by technology mandates.

Finally, DRM is fundamentally misguided because the First Amendment requires Copyright to allow reasonable unauthorized copying as fair use.

Respectfully Submitted,  
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